

A NEW *COLOSTETHUS* (ANURA: DENDROBATIDAE) FROM ECUADOR

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Abstract.—A new species of dendrobatid frog from southeastern Ecuador, *Colostethus nexipus*, is described. This species is distinguished from other members of *Colostethus* by the combination of extensive toe webbing and the presence of distinct dorsolateral and oblique lateral light stripes.

An undescribed member of the dendrobatid genus *Colostethus* has come to my attention through the generosity of Alice G. C. Grandison of the British Museum (Natural History). The specimens described are from a collection made by the British Los Tayos Archaeological Expedition and presented to the British Museum. Assignment of this species to *Colostethus* is a matter of convenience because dendrobatids that lack the apomorphies of *Atopophrynus*, *Dendrobates*, or *Phyllobates* are currently referred to the basal grade-genus *Colostethus* (see Lynch 1982, Lynch and Ruiz-Carranza 1982).

Colostethus nexipus, new species

Figs. 1, 2

Holotype.—BMNH 1983.1061, adult male obtained at Los Tayos, Morona-Santiago Province, Ecuador, 78°12'W, 3°10'S, 9 Jul 1976 by Philip Ashmole and J. K. Campbell.

Paratypes.—All from the vicinity of the type locality: BMNH 1983.923 (small male), in a shallow cave adjacent to the Río Coangos (a tributary of the Río Santiago), 1 Aug 1976 by Philip Ashmole; BMNH 1983.1060 (small male), same data as holotype; KU 194164 (small male) and BMNH 1983.924 (newly transformed) from bottom (50 m) of main cave shaft, on walls, 9 Jul 1976 by Philip Ashmole and J. K. Campbell.

Diagnosis.—A dendrobatid frog not exhibiting bright coloration, loss of ears, or

fusion of first and second toes; distinguished from all other members of *Colostethus* by the combination of extensive toe webbing and the presence of distinct dorsolateral and oblique lateral light stripes. *Colostethus nexipus* cannot be confused with any other known species.

Description.—Head as wide as body, slightly wider than long; snout truncate and rounded in lateral view; nostrils small, slightly protuberant and directed anterolaterally; canthus rostralis rounded but discernible; loreal region concave; lips not flared; snout short; interorbital region flat, slightly narrower than width of upper eyelid; no tubercles on head; weak supratympanic fold; tympanum evident; postrictal tubercles not evident; choanae concealed by palatal shelf of maxillary arch when viewed from directly below; vomerine odontophores absent; numerous teeth on premaxillae and maxillae; tongue longer than wide, posterior notch very broad and shallow; posterior $\frac{3}{5}$ not adherent to floor of mouth; vocal slits present; skin of dorsum finely shagreened, not easily abraded; folds on dorsum absent; skin of venter finely shagreened; vent opening at upper level of thighs; no enlarged warts in vicinity of vent; ulnar fold and tubercles absent; palmar tubercle round, about 4 times larger than thenar tubercle; supernumerary palmar tubercles absent; subarticular tubercles indistinct, round, flat; lateral fringe on fingers present as weak ridge; third finger not swol-

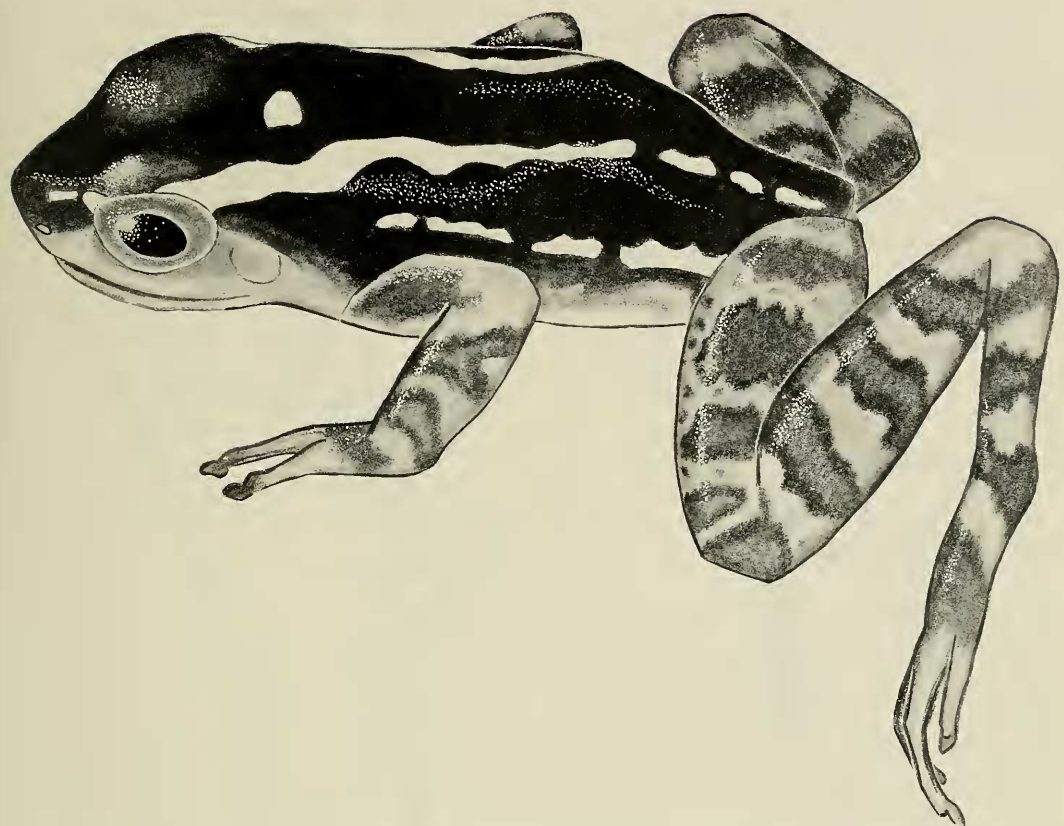


Fig. 1. Paratype of *Colostethus nexipus*, BMNH 1983.923. Snout-vent length equals 21.3 mm.

len; tips of fingers expanded to form pads, approximately 1.5 times width of digit; pair of scutes atop tips of fingers and toes, not differing in coloration from digits; second finger shorter than first (anomalously so on right hand; in paratypes second longer than first); condition of thumbs of breeding males unknown; tubercles absent from knee, heel, or tarsus; tarsal fold weak; inner metatarsal tubercle nearly twice as long as wide, flat, at least twice as large as flat, round outer metatarsal tubercle; supernumerary plantar tubercles absent; subarticular tubercles round to ovoid, flat; toe tips expanded to form pads; toes with prominent lateral fringes confluent with toe webbing; toe webbing formula (after Savage and Heyer 1967) I 0-1 II 0-1.7 III 1-2 IV 2-1 V; webbing

incised; when hind legs flexed and held at right angles to sagittal plane, heels touch.

Coloration in preservative.—(Holotype is formalin-darkened so coloration has been determined, in part, from paratypes.) Dorsum dark brown with broad dorsolateral stripe extending from eye to vent (stripe broken posteriorly); flanks dark brown with broken, white, oblique lateral stripe extending from point above insertion of forelimb to groin; hind limbs pale brown with dark cross-bars; forelimbs tan with irregular dark blotches; venter pale brown with dark stippling, becoming darker in the gular region, not forming collar or discernible spots.

Measurements of holotype in mm.—Snout-vent length 23.9; tibia 11.9; head width 8.2; head length 7.8; distance from

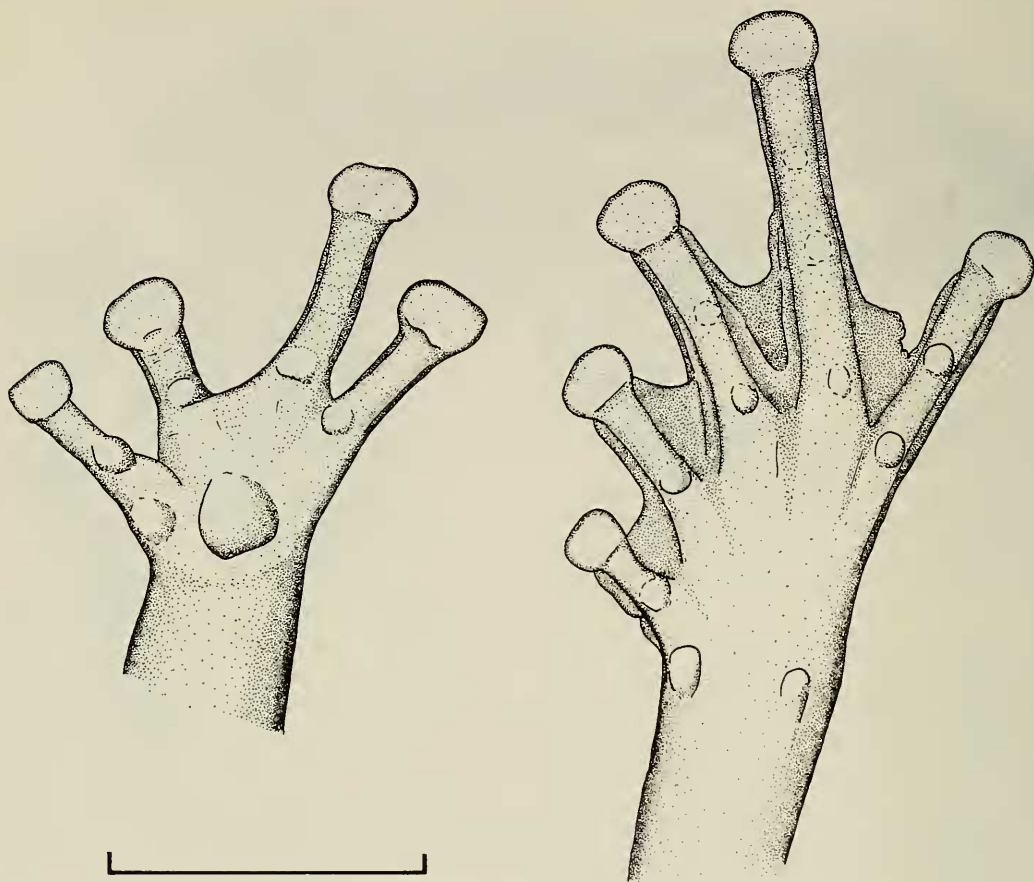


Fig. 2. Palmar views of left hand and left foot of holotype. Bar equals 5 mm.

tip of snout to angle of jaw 8.2; upper eyelid width 2.6; interorbital distance 2.4; eye length 3.5; eye to nostril distance 2.0.

Etymology.—The epithet, *nexipus*, is a Latin noun in apposition, derived from the Greek *nexipous*, meaning web-foot.

Discussion.—The type locality is in rain forest. The types were collected in the vicinity of a 50 m deep limestone cave shaft that intermittently receives from the Río Coangos a waterfall that carries with it tree trunks and other debris. Although two of the paratypes were collected from within this cave, it is doubtful that *Colostethus nexipus* is normally cave-dwelling. Non-cavernicolous species also found in the cave were the gymnophthalmine teiid lizards

Alopoglossus buckleyi and *Euspondylus guentheri*. *Colostethus nexipus* is a denizen of stream banks and adjacent wet forest, like many of its congeners. The phylogenetic relationships of *C. nexipus* are unclear because it lacks any of the striking apomorphies (e.g., swollen third finger in males, dark collar, or chest spots) that characterize putative monophyletic groups within *Colostethus*.

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